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Claims

1.   A method for implementing minimum activity during discontinuous transmis-
sion in a telecommunication connection used to carry a service, which service is one

5   of a number of possible services, at least one of which involves transmitting upper-
level scheduled silence-breaking transmissions at predetermined regular intervals
during otherwise silent periods in the service, **characterised** in that the method
comprises the steps of:
- determining (407, 408, 409) a maximum length of a silent period that is longer

10   than the predetermined regular intervals between upper-level scheduled silence-
breaking transmissions transmitted by a service that involves transmitting upper-
level scheduled silence-breaking transmissions, and
- at a certain layer of a protocol stack governing communication over the telecom-
munication connection, observing (411) the occurrence of silent periods and trans-

15   mitting (412) a dummy block over the telecommunication connection if the length
of an observed silent period reaches said maximum length without an upper-level
scheduled silence-breaking transmission or payload data having been transmitted.

2.   A method according to claim 1, **characterised** in that the step of determining

20   a maximum length of a silent period comprises:
- classifying (401, 402, 403, 404, 405, 406) the telecommunication connection ac-
cording to channel type and interleaving type, and
- determining (407, 408, 409) the maximum length of a silent period according to
the classification of the telecommunication connection.

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3.   A method according to claim 2, **characterised** in that the step of determining
a maximum length of a silent period comprises:
- classifying (401, 402, 403, 404, 405, 406) the telecommunication connection into
either a dedicated basic physical shared channel at full rate, hereinafter DBPSCH/F,

30   or a dedicated basic physical shared channel at half rate, hereinafter DBPSCH/H,
and into either a 4 bursts rectangular interleaving type, an 8 bursts diagonal inter-
leaving type or a 4 bursts diagonal interleaving type, and
- determining (407, 408, 409) the maximum length of a silent period according to
the following rules:

35   - for 4 bursts rectangular interleaving and DBPSCH/F, a maximum length of a
                silent period is a first number of time division multiple access frames, exclud-
                ing slow associated control channel frames,

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- for 8 bursts diagonal interleaving and DBPSCH/F, a maximum length of a silent period is a second number of time division multiple access frames, excluding slow associated control channel frames,
- for 4 bursts rectangular interleaving and DBPSCH/H and for 4 bursts diagonal interleaving and DBPSCH/H, a maximum length of a silent period is a third time division multiple access frames, excluding slow associated control channel frames.

4.   A method according to claim 3, **characterised** in that said first number is 44, said second number is 40, and said third number is 20.

5.   A method according to claim 1, **characterised** in that it comprises a step of controlling at least one of maximum length of an observed silent period before transmitting a dummy block and a number of dummy blocks sent after an observed silent period through a parameterised command from an upper layer in said protocol stack.

6.   An arrangement for implementing minimum activity during discontinuous transmission in a telecommunication connection used to carry a service, comprising:
- means for implementing Layer 1, 2 and 3 functionalities of a protocol stack governing communication over the telecommunication connection,
- as a part of said means, a dummy block functionality (303) adapted to transmit dummy blocks within the telecommunication connection according to certain rules, **characterised** in that the dummy block functionality (303) comprises a dummy block timing part (304) adapted to determine a maximum length of a silent period that is longer than a predetermined regular interval between upper-level scheduled silence-breaking transmissions transmitted by a service that involves transmitting upper-level scheduled silence-breaking transmissions, and to trigger the transmission of a dummy block over the telecommunication connection if the length of an observed silent period reaches said maximum length without an upper-level scheduled silence-breaking transmission or payload data having been transmitted.

7.   An arrangement according to claim 6, **characterised** in that it also comprises a signal codec (101) adapted to act as a source of information to be transmitted over the telecommunication connection, and said signal codec is also adapted (106) to transmit said upper-level scheduled silence-breaking transmissions at predetermined regular intervals during otherwise silent periods in a signal to be encoded in the signal codec.